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ABSTRACT

Designed to assist adult basic education (ABE) teachers and administrators in coping with learning disabled adults, Project BEST (Better Educational Services through Testing) centered on training selected Kansas adult educators in the use of a prescriptive-diagnostic tool for evaluating adults, on providing these teachers with the most current research and theory on adult learning disabilities, and on providing Kansas with lead instructors and resource specialists in the area of adult learning disabilities. These objectives were reached through several activities, including two training sessions conducted by an adult learning specialist; hands-on training experience with the London Procedure (Weisel 1979); provision of practice in field testing, profile analysis, and written individual education programs (IEPs); and programs providing exposure to a wide variety of information on adult learning disabilities. The results of the training efforts were measured by a pre-test and post-test questionnaire designed to measure trainees' knowledge of learning disabilities as well as clues to visual and auditory problems. Project BEST has laid the groundwork for a statewide learning disabilities awareness program. Furthermore, the project participants are now able to serve as lead instructors and resource personnel for a statewide instructional program. (MN)

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BUTLER COUNTY COMMUNITY COLLEGE
PROJECT B.E.S.T.

"BETTER EDUCATIONAL SERVICES THROUGH TESTING"

FINAL PROJECT REPORT: 1981-82

This project was funded by 310 monies from the Kansas
State Department of Education, Adult Education Section, awarded
to Butler County Community College, El Dorado, Kansas.

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ADMINISTRATOR AND CONSULTANTS

Dr. Larry F. Devane, Project Director
Vice President of Development & Instruction
Butler County Community College

Mrs. Joy Choens
Ks. ABE/GED Coordinator/Director
Butler County Resource Center

Ms. Laura Weisel, Director of Education
Central Ohio Psychiatric Hospital
Columbus, Ohio

Dr. Donald Goldenbaum
Goldenbaum Associates
Overland Park, Kansas

Ms. Nancy Blaine, Project Coordinator
Project BEST
Butler County Community College

ABSTRACT

Project BEST (Better Educational Services through Testing) was designed to assist Adult Basic Education (ABE) teachers and administrators in coping with learning disabled adults. These educators are being called upon to meet the needs of adult learners for whom past efforts have failed to produce a consistent educational success.

Project BEST, centered on training selected Kansas adult educators in the use of a prescriptive-diagnostic tool for evaluating adults, providing these educators with the most current research and theory on adult Learning Disabilities, and providing Kansas with lead instructors and resource specialists in the area of adult Learning Disabilities. These objectives were reached through several activities: 1) adult learning specialist, Laura Weisel, led two training sessions, 2) hands-on training experience with the London Procedure, 3) field testing, profile analysis, and written IEP's, 4) providing exposure to a wide variety of information on adult Learning Disabilities (e.g., Oral Roberts University videotapes, ERIC Publications, etc.)

The results of the year's training efforts were measured by an interest questionnaire designed to measure the trainee's general knowledge of Learning Disabilities, knowledge of defining characteristics of Learning Disabilities, and clues to visual and auditory learning problems. It was administered both before and after training. Statistical analysis was made on the correct answers of the pre-test and post-test, and the percentage difference between the two. The results were statistically significant at the .001 level.

Project BEST has lain the groundwork for a statewide Learning Disabilities awareness program. The participants in Project BEST are now able to serve as lead instructors and resource personnel for a statewide instructional program. Future benefits for Kansas' learning disabled will be realized with the implementation of the Learning Disabilities awareness program.

ACKNOWLEDGEMENTS

Throughout the training year, 1981-82, Project BEST has seen a cooperative effort among Kansas Adult Basic Education administrators and teachers. I appreciate the willingness on the part of Kansas area coordinators and local program directors to give release time to the teachers, and to allow testing time during their regular teaching schedule.

There were several people who worked behind the scenes on cover design and materials production. I would like to thank Dr. Gene Marsh for designing the BEST logo, Rebecca Johnson-Kuntz for the help with the BEST Resource Directory and the final report, to Leslie Harvey for videotaping the training sessions, and preparing transparencies, and to Donald Koke for his screen printing advice and service.

Finally I want to thank my two editors, Mike Blaine and Sonja Summer.

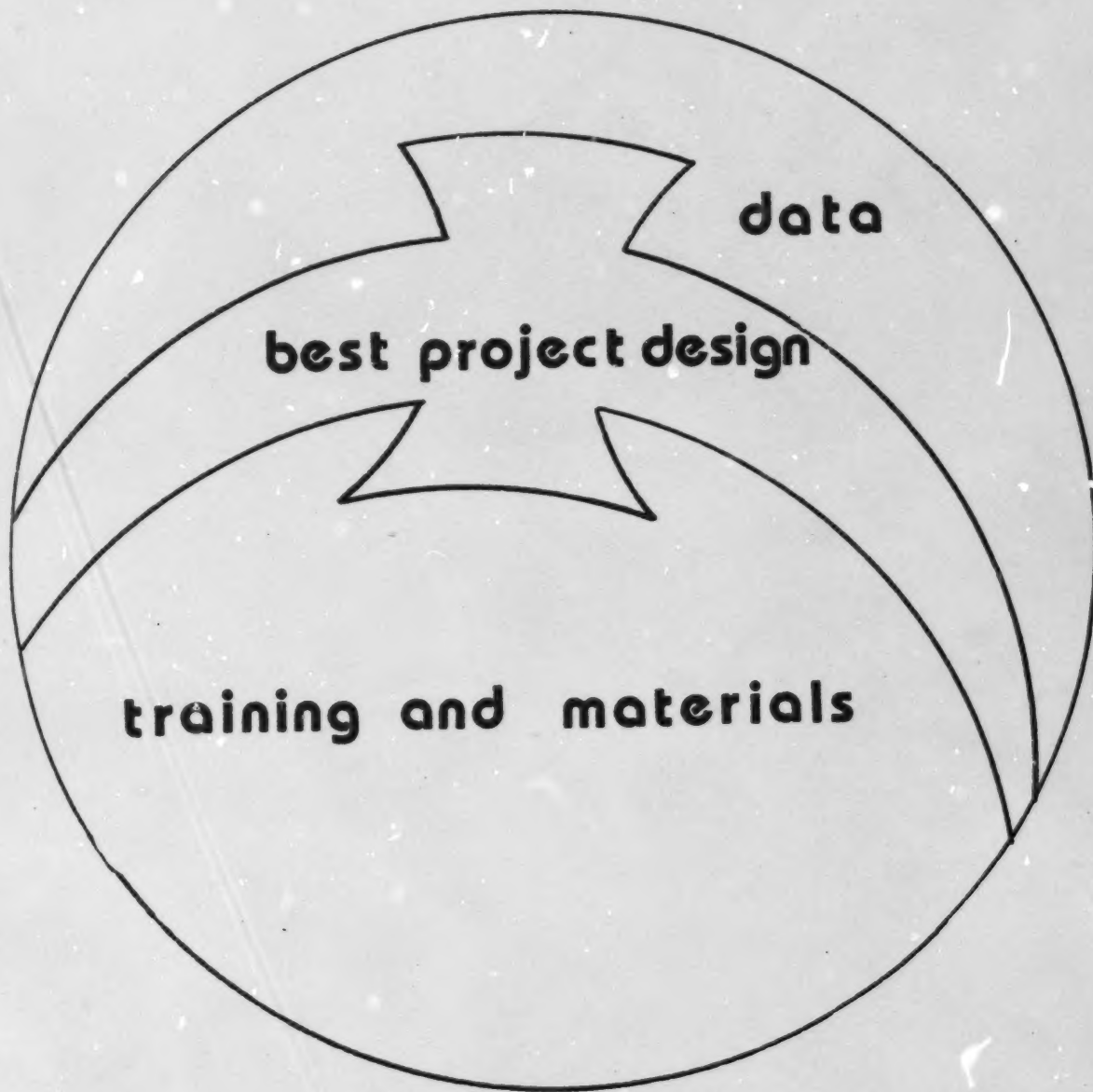


TABLE OF CONTENTS

ABSTRACT

LIST OF TABLES

I. BEST Project Design

- A. Learning Disability Materials
 - 1. Background Information
 - 2. New Resources for Kansas
 - 3. A Prescriptive-diagnostic Tool
- B. Trainee/Researcher Selection
- C. Data Collection
 - 1. Interest Questionnaire
 - 2. Testing

II. Training and Materials

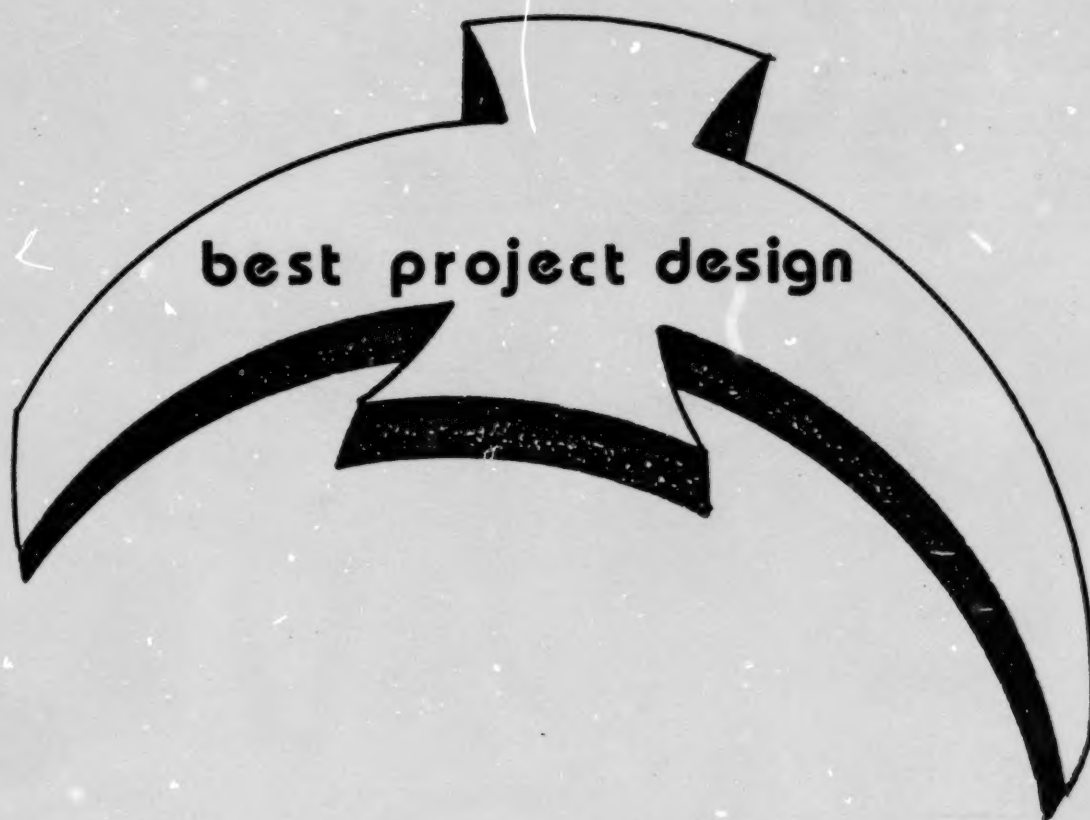
- A. Purpose
- B. Kick-off Session
- C. First Training Session
- D. Second Training Session
- E. Congratulations and Thanks Dinner

III. Data and Data Results

- A. Interest Questionnaire
 - 1. Previous Training Section
 - 2. Learning Disability Awareness
 - 3. Defining Characteristics of Learning Disabilities
 - 4. Clues to Visual Learning Problems
 - 5. Clues to Auditory Learning Problems
 - 6. Summary of Pretest/Posttest Outcomes
- B. Conclusions

LIST OF TABLES

TABLE	TITLE	PAGE
1	Resource Materials Listing	2
2	Participating Researchers and Directors	7
3	Previous Training and Experience	12
4	London Procedure Rating	13
5	True/False Statements	15
6	Defining Characteristics	17
7	Observable Clues to Visual Learning Problems	19
8	Observable Clues to Auditory Learning Problems	21
9	Summary of Pretest/Posttest Outcomes	22
10	Test of Statistical Significance	23



BEST PROJECT DESIGN

Learning Disability Materials

A. BACKGROUND INFORMATION AND TEST INFORMATION

NAPCAE Position Statement - NAPCAE (National Association for Public Continuing & Adult Education) Committee on Adults with Exceptional Learning Problem's Position Statement served as the guideline and theoretical norm for Project BEST's emphasis on adult Learning Disabilities.

Basic Resource Material - ERIC publication, Adult Learning Problems: Insights, Instruction, and Implications, (Weisel, 1980) was the major work used for background information.

Supplementary materials - A wide range of materials concerning learning and learning problems was presented during the training and for use by the trainees for future inservice presentations. (See Table 1 for complete listing).

Personal interviews - Interviews were conducted with several adult learning disability specialists in Kansas and Oklahoma (E.G. Delores Mann, Dr. Wanda Hartmann). They presented their programs, gave specific teaching and testing techniques and offered a good foundation of support.

TABLE 1

Weisel, Laura. Adult Learning Problems: Insights, Instruction and Implications, Columbus, Ohio: ERIC Publications, 1982.

ERIC Overview Fact Sheet No. 9. "Adult Learning Disabilities", Columbus, Ohio; National Center for Research in Vocational Education, 1982.

Blaine, Nancy. BEST Resource Directory, Butler County Community College. 1982.

Jordan, Dale. Dyslexia in the Classroom, Columbus, Ohio: Charles E. Merrill Publishing Co., 1977.

"Helping Adults with Learning Problems, A Handbook for Kansas Adult Educators", ABE/GED Life Skills Project, Kansas Area Service Centers.

Jordan, Dale. "Learning Disability Characteristics of ABE Students", Oklahoma City, Oklahoma; Jordan Diagnostic Center, 1978.

Weisel, Laura. Learning Disability Glossary, Columbus, Ohio; 1980.

President's Committee on Employment of the Handicapped. Learning Disability: Not Just A Problem Children Outgrow, Washington, D.C.; U.S. Government Printing Office, 1982.

Cruickshank, Morse, and Johns. Learning Disability: The Struggle from Adolescence Toward Adulthood, Syracuse: University Press, 1980.

NAPCAE Committee on Adults with Exceptional Learning Problems, "Position Statement", Washington, D.C.; 1980.

Miller, Susanne. "Notes for Tutors", to accompany Learning Disabilities Training Module for Teaching Persons with Special Reading Problems, Syracuse: Literacy Volunteers of America, Inc., 1978.

Weisel, Laura. "Pluses to the Overall Learning Environment" and "Specific Instructional Pluses for Learners with Specific Information Processing Difficulties", Columbus, Ohio: 1980.

Smith, Frank. Reading Without Nonsense, Columbia University: Teachers College Press, 1978.

Bley and Thornton, Teaching Mathematics to the Learning Disabled, Rockville, Maryland: Aspen Publications, 1981.

Weisel, Laura. "The Working Brain", Schematic drawing of the brain, Columbus, Ohio: 1980.

"Topics in Learning Disabilities". Aspen Publications, 1981.

Smith, Frank. "Twelve Easy Ways to Make Learning To Read Difficult", Psycholinguistics and Reading, New York: Holt, Rinehart, and Winston, Inc., 1973

Phelps-Terasaki and Phelps-Gurn. Written Language Instruction, Theory and Remediation, Rockville, Maryland: Aspen Publications, 1982.

B. NEW RESOURCES FOR KANSAS

BEST purchased a total of 51 books. Five titles were placed in the four area cluster locations. Four titles were given individually to the researcher/trainees for their future involvement in Kansas' emphasis on adult Learning Disabilities.

Videocassettes - Kansas now has available three video-cassettes produced at Oral Roberts University on the Learning Disabled Adult. Information concerning these cassettes, can be reached through Butler County Resource Center, 215 South Gordy, El Dorado, KS, 67042 or through the audiovisual department at Butler County Community College. Also available is a videocassette of an interview with a learning disabled adult who spoke to the paraprofessionals at Butler County Community College.

Resource Directory - A Learning Disability directory was compiled for the trainee's current and future research. The directory gave references to books, pamphlets, articles, newsletters, organizations, people contacts, London Procedure ordering information, and a variety of places to write for resource information.

C. PRESCRIPTIVE-DIAGNOSTIC TOOL

General description - The London Procedure (Weisel, 1978), is designed to provide a screening of visual and auditory functions and a diagnosis of visual perception, auditory perception and reading as an

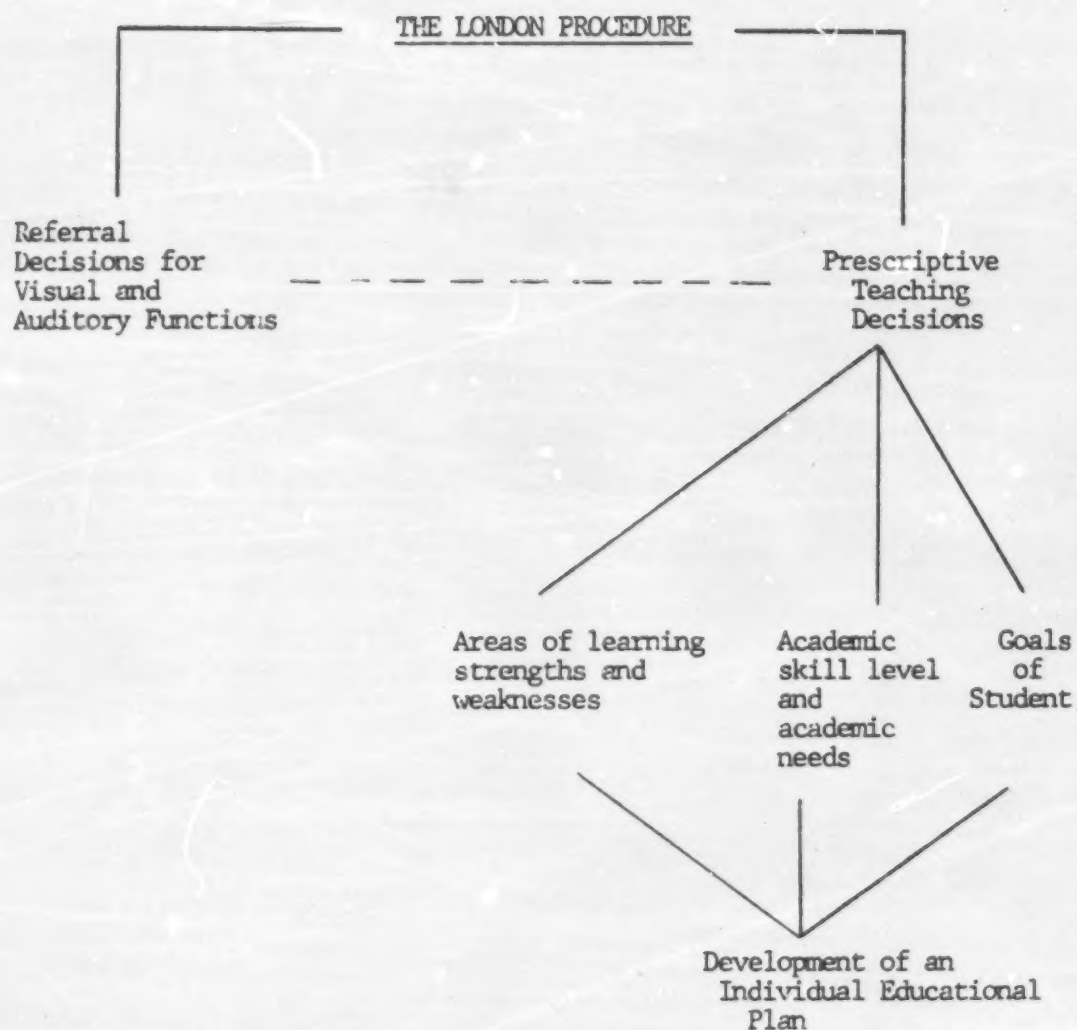
encoding and decoding process for Adult Basic Education (ABE) students functioning below the eighth grade level. The London Procedure is designed to provide information for two purposes:

- (1) To assist in identifying adults in need of medical or optometric referral for a learning related problem.
- (2) To assist in determining appropriate prescriptive teaching strategies based on the adult's specific learning strengths and weaknesses.

Prescriptive teaching strategies - Decisions for prescriptive teaching strategies are to be based upon three levels of information:

(1) the adult's learning strengths and weaknesses (2) the adult's academic skill level and academic needs and (3) the adult's goal as a student (London Procedure, Weisel, 1979). (see Diagram 1)

Diagram 1



(London Procedure, Weisel, 1979)

II. TRAINEES

Selection of researcher/trainees - Nine ABE teachers were selected as researchers from the four Adult Basic Education geographical locations, to represent their cluster in London Procedure and Learning Disability training. Each researcher/trainee was selected for his or her abilities and experience in the field of adult education. Table 1 contains a list of the researcher/trainees who participated from Kansas, their cluster location, their local director, and their area coordinator (See Table 2). In the future, these ABE teachers will serve as lead instructors for Kansas in the area of adult learning problems and administration of the London Procedure.

TABLE 2
PARTICIPATING RESEARCHERS AND DIRECTORS

<u>NAME</u>	<u>CLUSTER LOCATION</u>	<u>LOCAL PROGRAM DIRECTOR</u>	<u>AREA COORDINATOR</u>
<u>Georgia Girardeau</u>	<u>Northeast</u>	<u>Clint Hammer</u>	<u>Wesley Pelsue</u>
<u>James Jones</u>	<u>Northeast</u>	<u>Roger Dirks</u>	<u>Wesley Pelsue</u>
<u>Waunita Platt</u>	<u>Northeast</u>	<u>Bob Becker</u>	<u>Jim Lenz</u>
<u>Xyla Johnson</u>	<u>West</u>	<u>Doug Radohl</u>	<u>Jim Lenz</u>
<u>Marlene Miller</u>	<u>West</u>	<u>Debbie Goodman</u>	<u>Jim Lenz</u>
<u>Doris Ann Brinegar</u>	<u>Central</u>	<u>Harry Anderson</u>	<u>Marilin Frey</u>
<u>Sue Choens</u>	<u>Central</u>	<u>Joy Choens</u>	<u>Marilin Frey</u>
<u>Jerry Culp</u>	<u>Southeast</u>	<u>Margaret Raines</u>	<u>Joy Choens</u>
<u>Mary Hughes</u>	<u>Southeast</u>	<u>Joan Pearson</u>	<u>Joy Choens</u>
<u>Joy Wright</u>	<u>Southeast</u>	<u>Evelyn Musgrove</u>	<u>Joy Choens</u>

III. DATA COLLECTION

Interest questionnaire - An interest questionnaire was designed to ascertain which members of the select core had previous exposure to the London Procedure, which members had previous training with the London Procedure, and their perceptions of the test. The questionnaire also measured the researchers' familiarity with adult Learning Disabilities. The questionnaire was administered before and after training. Statistical comparisons were made between the pretest and the posttest. (See Appendix 1 for Questionnaire Form)

Testing - The researchers administered the London Procedure to eight adults, in four age groups:

19 and under

20-29

30-39

40 and over.

Statistical comparisons were run between age, cluster location, reading level and previous testing experience.



TRAINING AND MATERIALS

I. TRAINING

Purpose - The training sessions had a three-fold purpose:

- (1) To increase the researcher's awareness of current learning disability theory
- (2) To train them in the use of the London Procedure
- (3) To enable them to serve as lead instructors for Kansas in the areas of adult learning problems and administration of the London Procedure

Kick-off session - A short planning session was held the first of October in Salina. At that time, the details were set for the first face to face training session with Laura Weisel the end of October. Introductions were made of both project administrators and project researchers. The researchers were given the following materials:

- (1) A general description of the grant proposal
- (2) A copy of Adult Learning Problems: Insights, Instruction, Implications
- (3) The interest questionnaire to be filled out and returned
- (4) The NAPCAE Position statement on adult exceptional learners and NAPCAE Learning Problems Notes Issue No. 1, January, 1980.
- (5) The Kansas Handbook on Helping Adults with Learning Problems.

The researchers were then sent back to their locations to prepare for training to occur later the same month.

First Training Session - The researchers were mailed additional background information concerning learning disabilities, during October. The first training session was held in El Dorado, Kansas at Butler County Community College on November 6 and 7, 1981. Laura Weisel presented material covering:

- (1) Test administration and scoring

- (2) Visual function and visual perception as related to the London Procedure
- (3) Auditory function and auditory perception as related to the London Procedure
- (4) Reading encoding and decoding as related to the London Procedure
- (5) Adult Learning Problems: Insights, Instruction, and Implications.

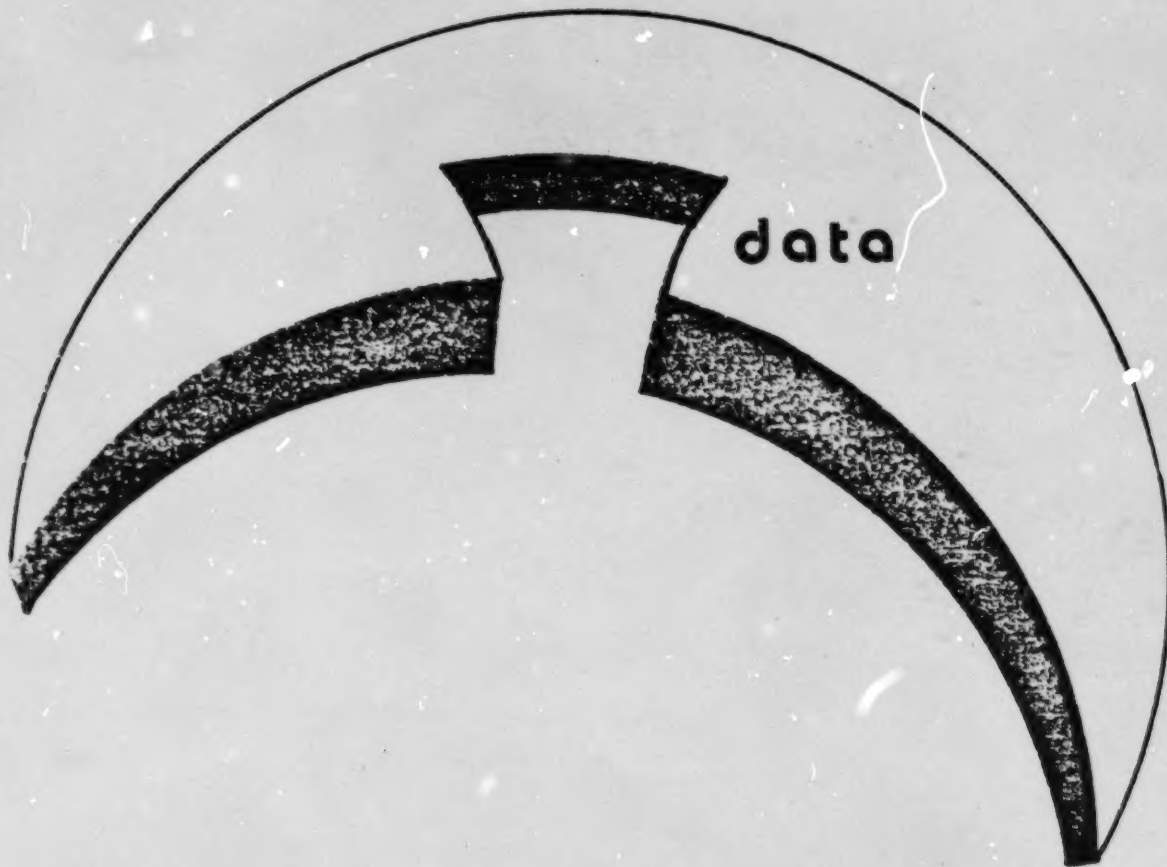
Arrangements were made for the second training session to be held in February. During the intervening months, researchers practiced administering the London Procedure and completing profiles. (See Appendix 2 for Student Information Form).

Second Training Session - The researchers met at the Butler County Adult Resource Center in El Dorado for the second training session, February 1 and 2, 1982. The session, led by Laura Weisel, centered around:

- (1) Teaching techniques and materials
- (2) Writing IEP's
- (3) Accurate profile analysis
- (4) Conducting future inservice presentations

The researchers brought the test profiles and IEP's they had completed during the previous three months. Individual attention was given by Laura to specific problem profiles and possible education plans for compensation and remediation. The second training session was cut short due to a snowstorm. Therefore, a copy of the inservice agenda for 1982-83, prepared by the researchers and Laura during the session, was mailed later. An evaluation form of the training session, the materials and the presenter was also mailed (See Appendix 3 and 4).

Congratulations and Thanks - In appreciation for the hours invested in Project BEST (approximately 100 hours in reading, testing and training per trainee), the enthusiasm brought to the training sessions, and the friendships started and nurtured during this year, a dinner was held at Kansas Adult Education Association spring conference in Salina, for the people associated with BEST.



DATA AND DATA RESULTS

I. INTEREST QUESTIONNAIRE

Previous Training - Project researchers were given the preproject questionnaire at the kick-off session in October and the postquestionnaire in April, after training was complete. The first part of the questionnaire was created to ascertain what percentage of the researchers had previous London Procedure training, what percentage had actually used the London Procedure Test, their general feeling for the usefulness of the London Procedure and response to specific tasks of the London Procedure (See Table 3 results).

TABLE 3

PREVIOUS TRAINING AND EXPERIENCE

BACKGROUND INFORMATION:

1. Have you received any formal training in the use of the London Procedure prior to attending this seminar?

50% YES

50% NO N=6

2. Have you used the London Procedure in your work before attending this seminar?

30% YES

70% NO N=10

3. If you have used the London Procedure before, how helpful have you found it to be working with adult learners?

66.7% VERY HELPFUL

33.8% SOMEWHAT HELPFUL

_____ NEUTRAL

_____ SOMEWHAT HELPFUL

_____ VERY HELPFUL N=3

Before BEST training, 3 out of the nine had formal London Procedure training, and the same three had used the London Procedure in actual testing of ABE/GED students. From that experience, those researchers rated the London Procedure on specific areas (See Table 4). The researchers with previous experience with the London Procedure found it a desirable tool for ABE/GED students in every area except auditory testing procedures. They agreed that the auditory testing procedures were difficult for ABE/GED students because an outside audiologist had to be called in or the student had to go to an audiologist's office. The inconvenience threatened the completion of the total London Procedure profile.

TABLE 4
LONDON PROCEDURE RATING

If you have used the London Procedure before, how desirable have you found each of the following aspects of the procedure to be?
(1=VERY DESIRABLE, 5=VERY UNDESIRABLE)

	<u>AVERAGE</u>	<u>N</u>
TESTING INSTRUCTIONS PROVIDED IN MANUAL	1.0	2
EQUIPMENT INVOLVED	1.3	3
TIME REQUIRED TO ADMINISTER	1.7	3
SCORING PROCEDURES	2.0	3
VISUAL TESTING PROCEDURES	2.7	3
AUDITORY TESTING PROCEDURES	4.3	3
READING TESTING PROCEDURES	1.0	3
REMEDIATIONS SUGGESTED IN MANUAL	2.7	3
COMPENSATIONS SUGGESTED IN MANUAL	2.3	3
INSTRUCTIONS PROVIDED IN MANUAL FOR DEVELOPING INDIVIDUALIZED INSTRUCTIONAL PROGRAMS	<u>2.3</u>	<u>3</u>
TOTAL	2.2	

Learning Disability Awareness - The second part of the interest questionnaire was divided into four parts.

- I. General knowledge of LD
- II. Knowledge of defining characteristics of LD
- III. Knowledge of clues to visual learning problems
- IV. Knowledge of clues to auditory learning problems

The first section that dealt with the researchers general knowledge of Learning Disabilities, consisted of eight true/false statements. The pre and post percentage scores, and the post-pre percentage difference are presented in Table 5.

Results - The greatest improvement in this section came as a result of two statements: (1) The percentage of adults estimated to have Learning Disabilities is between one percent and three percent of the general population, and (2) Research shows that men are prone to Learning Disabilities, in adulthood, more than women. Both showed an improvement of 17.5 %. This section showed an overall improvement in the researchers knowledge of Learning Disabilities of 6.6 %. (See Table 5).

TABLE 5

True/False Statements

Please answer each of the following by putting a "T" in the blank if you think the statement is true, and an "F" if you think the statement is false.

	PRETEST	POSTTEST	
	N=10	N=8	
	AVG. or %	AVG. or %	POST-PRE DIFF
T Many adults with learning disabilities have been misdiagnosed earlier in life as being "educably mentally retarded."	100.0%	87.5%	-12.5%
F Learning disability problems generally appear in adults late in life.	90.0%	100.0%	+10.0%
F Most adults with learning disabilities manage to overcome their negative attitudes toward schooling as they reach adulthood.	100.0%	100.0%	
F Learning disability is actually a mild form of mental retardation.	90.0%	100.0%	+10.0%
F The percentage of adults estimated to have learning disabilities is between 1% and 3% of the general population.	60.0%	87.5%	+17.5%
F Some individuals with learning disabilities manage to own and operate their own businesses.	100.0%	100.0%	
T Adults with learning disabilities often compensate for their deficiencies by avoiding situations where their disabilities will be "discovered."	100.0%	100.0%	
F Research shows that men are more prone to learning disabilities, in adulthood, than are women.	70.0%	87.5%	17.5%
TOTAL	88.7%	95.3%	6.6%

Defining Characteristics of Learning Disabilities - The second section of the questionnaire was designed to measure the knowledge gained concerning defining characteristics of Learning Disabilities. A list of twenty items was provided of possible defining characteristics. The researchers were asked to check the ones they felt were valid. Table 6 gives the list that the researchers chose from, the pre and post percentages and the percentage differences.

Results - The greatest improvement in this section came on one item, tone deafness to some speech sounds, with an increase of 40%. The next biggest increase came on the item, poor sensory integration, with an increase of 37.5%, and a close third on the item, poor school grades, with an increase of 35%. Factors believed to contribute to these large increases, are: (1) the hands-on approach of testing and profile analysis during the project year, (2) the chance for direct feedback from Laura Weisel, author of the London Procedure. The pretest total average was 65.5%, the posttest total average was 84.4% with a significant increase of 18.9% (See Table 6).

TABLE 6
DEFINING CHARACTERISTICS

6. Which of the following are defining characteristics of adults with learning disabilities? (check all that apply.)	PRETEST	POSTEST	PRE-POST
	N = 10 AVG or %	N = 8 AVG. or %	
☐ Poor muscle tone	80.0%	100.0%	20.0%
☒ Low Self-esteem	100.0%	87.5%	-12.5%
☐ Slurred or unintelligible speech	60.0%	87.5%	27.5%
☐ Low socioeconomic status	70.0%	87.5%	17.5%
☒ Poor sensory integration	50.0%	87.5%	37.5%
☐ Subnormal head circumference	90.0%	100.0%	10.0%
☐ Poor school grades	40.0%	75.0%	35.0%
☐ Inability to carry line	90.0%	100.0%	10.0%
☐ Spasmodic locomotive movements	70.0%	87.5%	17.5%
☐ Low intelligence test scores	50.0%	75.0%	25.0%
☒ Confusions in sequencing	90.0%	100.0%	10.0%
☒ Tone deafness to some speech sounds	60.0%	100.0%	40.0%
☐ Blue-green color blindness	90.0%	100.0%	10.0%
☐ Inappropriate social behaviors	60.0%	75.0%	15.0%
☒ Need for multi-inputs of information	50.0%	75.0%	25.0%
☒ Difficulties with vision	50.0%	75.0%	25.0%
☐ Obesity and acne	90.0%	87.5%	- 2.5%
☐ Agraphia	50.0%	75.0%	25.0%
☐ Dysgraphia	50.0%	62.5%	12.5%
☐ Dyslexia	20.0%	50.0%	30.0%
TOTAL	65.5%	84.4%	18.9%

Clues to Visual Learning Problems - The third section of the questionnaire was designed to measure the knowledge gained of observable clues to visual learning problems. A list of ten items was provided of possible observable clues. The researchers were asked to check the ones they felt were valid. Table 7 gives the list the researchers chose from, the pre and posttest percentages and post-pre percentage differences.

Results - The greatest improvement in this section came under two clues, the first being encrusted eyelids, increasing 70% and the second, trait of writing uphill or downhill on paper increased 50%. There were three items that decreased by 12.5%. But because of the large gains in the other items there was a post-pre significant difference of 14.2%. Overall the face to face training and subsequent testing experiences enhanced the researchers understanding and knowledge of visual learning problem clues (See Table 7).

TABLE 7
OBSERVABLE CLUES TO VISUAL LEARNING PROBLEMS

7. Which of the following are observable clues to visual learning problems?
(Check all that apply).

	PRETEST		POSTTEST	
	N=10		N=8	
	AVG. or %		AVG. or %	POST-PRE (DIFF)
☒ Head moves along with eyes while reading	80.0%		87.5%	7.5%
☐ Difficulty seeing under conditions of low illumination	70.0%		100.0%	30.0%
☒ Encrusted eyelids	30.0%		100.0%	70.0%
☒ Tendency to close one eye while reading	100.0%		87.5%	-12.5%
☐ Bulging or protruding eyes	90.0%		75.0%	-15.0%
☐ Tendency for eyes to cross while reading	30.0%		62.5%	32.5%
☐ Exceptionally thick eyeglasses	40.0%		75.0%	35.0%
☐ Eye color (pupillary) difficult to categorize	100.0%		87.5%	-12.5%
☒ Trait of writing uphill or downhill on paper	50.0%		100.0%	50.0%
☐ Presence of various types of color blindness	80.0%		100.0%	20.0%
TOTAL	76.0%		81.2%	14.2%

Clues to Auditory Learning Problems - The fourth section of the questionnaire was designed to measure the knowledge gained of clues to auditory learning problems. A list of ten items was provided of possible observable clues. The researchers were asked to check the ones they felt were valid. Table 8 gives the list the researchers chose from, the pre and posttest percentages and post-pre percentage differences.

Results - The large increases shown under the visual clues section did not occur under auditory but the overall increase was significant. Two clues showed the greatest increase, presence of a hearing aid, 32.5% and tendency to speak too loudly in groups, 35%. Three of the observable auditory clues were answered correctly by 100% of the researchers both pre and posttests. Those three statements, with no percentage change, influenced the total change of 14.2%, although it was still significant (See Table 8).

TABLE 8
OBSERVABLE CLUES TO AUDITORY LEARNING PROBLEMS

8. Which of the following are observable clues to auditory learning problems?
(Check all that apply).

		PRETEST	POSTEST	POST-PRE DIFF.
		N=10	N=8	
		AVG. or %	AVG. or %	
☒	Inability to follow spoken instructions	100.0%	100.0%	
☐	Presence of excessive hair in ears	100.0%	100.0%	
☐	Tendency to avoid use of telephone	40.0%	62.5%	22.5%
☒	Problems in detecting syllables	100.0%	100.0%	
☐	Presence of hearing aid	30.0%	62.5%	32.5%
☐	Documented difficulty (via audiometer) in hearing tones above 29,000 cycles	70.0%	100.0%	30.0%
☐	Habitual pulling or tugging at earlobes	80.0%	75.0%	-5.0%
☐	Tendency to speak too loudly in groups	40.0%	75.0%	35.0%
☐	Reddish tinge to upper portion of ears	80.0%	87.5%	7.5%
☒	Mouth breathing	30.0%	50.0%	20.0%
TOTAL		67.0%	81.2%	14.2%

Summary of Pretest/Posttest Outcomes - All four sections of the questionnaire that were given both before and after the training, had positive results. The third section concerning knowledge of defining characteristics of Learning Disabilities, showed the greatest increase of 18.9%. Table 9 gives the summary of the pretest/posttest percentage outcomes and post-pre differences.

TABLE 9
SUMMARY OF PRETEST/POSTTEST OUTCOMES

Test Section	Content	Pre-Test % Correct (N=10)	Post-Test % Correct (N=8)	Post-Pre Differ. (+/-%)
I	General Knowledge of LD	88.7%	95.3%	+ 6.6%
II	Knowledge of defining characteristics of LD	65.5%	84.4%	+ 18.9%
III	Knowledge of clues to visual learning problems	67.0%	81.2%	+ 14.2%
IV	Knowledge of clues to auditory learning problems	67.0%	81.2%	+ 14.2%
TOTAL		70.0%	85.9%	+ 15.9%

Change in percentage of total items correct - The test of statistical significance for change in percentage of total items correct indicates a very significant rate of change. (Chi square = 30.66, df=1, p=.001). (See chi square table, Table 10.)

$$\chi^2 = 30.66, df=1, p = .001$$

TABLE 10
CHANGE IN TOTAL ITEMS CORRECT

Test of statistical significance for change in percentage of total items correct:

	<u>ITEMS CORRECT</u>	<u>ITEMS INCORRECT</u>	<u>TOTAL</u>	
Pretest	336	144	480	
Posttest	<u>330</u>	<u>54</u>	<u>384</u>	
TOTAL	666	198	864	

Conclusions and applications - Project BEST was designed to train selected Kansas Adult Basic Education personnel to be lead instructors and resource specialists in the use of the London Procedure and in instruction of adults with learning problems. This major objective was reached through:

1. Two face to face training sessions with learning specialist Laura Weisel
2. A hands-on approach to the London Procedure through field testing and individual profile analysis with professional feedback
3. A review of Learning Disability theory and practice
4. Writing IEP's for persons tested by the London Procedure
5. Preparation of an inservice agenda and transparencies for future Kansas instruction
6. A review of materials, for remediation and compensation for learning disabled adults, recommended by the London Procedure and available in Kansas adult resource centers
7. Groundwork laid for a statewide Learning Disability awareness program, with:
 - a. A prescriptive-diagnostic tool
 - b. A resource directory
 - c. Current Learning Disabilities Theory
 - d. Trained/experienced teachers and administrators.

This training year has brought a cohesiveness to the four area clusters. Teachers, local directors, area coordinators and the state director, contributed to the learning foundation of Kansas' ABE/GED program and its overall productivity. Kansas' ABE/GED population will be are effectively and efficiently served due to Project BEST's training, research, and testing.